Paul L Deangelis

List of Publications by Year
in descending order

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Version: 2024-02-01

73	4,061	94433	118850
papers	citations	37 h-index	62 g-index

74	74	74	2711
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Hyaluronan Synthases: A Decade-plus of Novel Glycosyltransferases. Journal of Biological Chemistry, 2007, 282, 36777-36781.	3.4	297
2	Hyaluronic Acid Production in Bacillus subtilis. Applied and Environmental Microbiology, 2005, 71, 3747-3752.	3.1	250
3	Nanoparticle Toxicology. Annual Review of Pharmacology and Toxicology, 2021, 61, 269-289.	9.4	163
4	Chemoenzymatic Design of Heparan Sulfate Oligosaccharides*. Journal of Biological Chemistry, 2010, 285, 34240-34249.	3.4	138
5	Identification and Molecular Cloning of a Unique Hyaluronan Synthase from Pasteurella multocida. Journal of Biological Chemistry, 1998, 273, 8454-8458.	3.4	126
6	Chemoenzymatic synthesis of glycosaminoglycans: Re-creating, re-modeling and re-designing nature's longest or most complex carbohydrate chains. Glycobiology, 2013, 23, 764-777.	2.5	126
7	Hyaluronan Synthase of Chlorella Virus PBCV-1. Science, 1997, 278, 1800-1803.	12.6	125
8	Microbial glycosaminoglycan glycosyltransferases. Glycobiology, 2002, 12, 9R-16.	2.5	125
9	Synchronized Chemoenzymatic Synthesis of Monodisperse Hyaluronan Polymers. Journal of Biological Chemistry, 2004, 279, 42345-42349.	3.4	122
10	Glycosaminoglycan polysaccharide biosynthesis and production: today and tomorrow. Applied Microbiology and Biotechnology, 2012, 94, 295-305.	3.6	118
11	Immunochemical Confirmation of the Primary Structure of Streptococcal Hyaluronan Synthase and Synthesis of High Molecular Weight Product by the Recombinant Enzyme. Biochemistry, 1994, 33, 9033-9039.	2.5	109
12	Hyaluronan: The Local Solution Conformation Determined by NMR and Computer Modeling is Close to a Contracted Left-handed 4-Fold Helix. Journal of Molecular Biology, 2006, 358, 1256-1269.	4.2	102
13	Dissection of the two transferase activities of the Pasteurella multocida hyaluronan synthase: two active sites exist in one polypeptide. Glycobiology, 2000, 10, 883-889.	2.5	99
14	Evolution of glycosaminoglycans and their glycosyltransferases: Implications for the extracellular matrices of animals and the capsules of pathogenic bacteria. The Anatomical Record, 2002, 268, 317-326.	1.8	99
15	Molecular Directionality of Polysaccharide Polymerization by the Pasteurella multocida Hyaluronan Synthase. Journal of Biological Chemistry, 1999, 274, 26557-26562.	3.4	95
16	Identification of the capsular polysaccharides of Type D and F Pasteurella multocida as unmodified heparin and chondroitin, respectively. Carbohydrate Research, 2002, 337, 1547-1552.	2.3	95
17	Rapid Chemoenzymatic Synthesis of Monodisperse Hyaluronan Oligosaccharides with Immobilized Enzyme Reactors. Journal of Biological Chemistry, 2003, 278, 35199-35203.	3.4	93
18	Topological Organization of the Hyaluronan Synthase fromStreptococcus pyogenes. Journal of Biological Chemistry, 2001, 276, 2037-2046.	3.4	83

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19	The Link Module from Ovulation- and Inflammation-associated Protein TSG-6 Changes Conformation on Hyaluronan Binding. Journal of Biological Chemistry, 2003, 278, 49261-49270.	3.4	81
20	Identification and Molecular Cloning of a Heparosan Synthase fromPasteurella multocida Type D. Journal of Biological Chemistry, 2002, 277, 7209-7213.	3.4	78
21	Chemoenzymatic Synthesis with Distinct Pasteurella Heparosan Synthases. Journal of Biological Chemistry, 2007, 282, 28321-28327.	3.4	77
22	Label-free analysis of physiological hyaluronan size distribution with a solid-state nanopore sensor. Nature Communications, 2018, 9, 1037.	12.8	73
23	Identification and Molecular Cloning of a Chondroitin Synthase from Pasteurella multocida Type F. Journal of Biological Chemistry, 2000, 275, 24124-24129.	3.4	72
24	Hyaluronan Synthesis in Virus PBCV-1-Infected Chlorella-like Green Algae. Virology, 1999, 257, 15-23.	2.4	71
25	Towards a Structure for a TSG-6Â·Hyaluronan Complex by Modeling and NMR Spectroscopy. Journal of Biological Chemistry, 2005, 280, 18189-18201.	3.4	69
26	Analysis of the two active sites of the hyaluronan synthase and the chondroitin synthase of Pasteurella multocida. Glycobiology, 2003, 13, 661-671.	2.5	66
27	Chemoenzymatic Synthesis of Uridine Diphosphate-GlcNAc and Uridine Diphosphate-GalNAc Analogs for the Preparation of Unnatural Glycosaminoglycans. Journal of Organic Chemistry, 2012, 77, 1449-1456.	3.2	61
28	Hyaluronan: the absence of amideâ€“carboxylate hydrogen bonds and the chain conformation in aqueous solution are incompatible with stable secondary and tertiary structure models. Biochemical Journal, 2006, 396, 487-498.	3.7	58
29	Yeast-derived Recombinant DG42 Protein of Xenopus Can Synthesize Hyaluronan in Vitro. Journal of Biological Chemistry, 1996, 271, 23657-23660.	3.4	56
30	Use of 15N-NMR to resolve molecular details in isotopically-enriched carbohydrates: sequence-specific observations in hyaluronan oligomers up to decasaccharides. Glycobiology, 2004, 14, 999-1009.	2.5	56
31	Biosynthesis of Hyaluronan. Journal of Biological Chemistry, 2005, 280, 8813-8818.	3.4	54
32	Identification of a Distinct, Cryptic Heparosan Synthase from Pasteurella multocida Types A, D, and F. Journal of Bacteriology, 2004, 186, 8529-8532.	2.2	49
33	A Refined Model for the TSG-6 Link Module in Complex with Hyaluronan. Journal of Biological Chemistry, 2014, 289, 5619-5634.	3.4	46
34	Enzymatic Synthesis of Glycosaminoglycan Heparin. Seminars in Thrombosis and Hemostasis, 2007, 33, 453-465.	2.7	44
35	Heparan Sulfate Domains Required for Fibroblast Growth Factor 1 and 2 Signaling through Fibroblast Growth Factor Receptor 1c. Journal of Biological Chemistry, 2017, 292, 2495-2509.	3.4	43
36	Enzymological Characterization of the Pasteurella multocida Hyaluronic Acid Synthase. Biochemistry, 1996, 35, 9768-9771.	2.5	42

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37	Critical Elements of Oligosaccharide Acceptor Substrates for the Pasteurella multocida Hyaluronan Synthase. Journal of Biological Chemistry, 2006, 281, 5391-5397.	3.4	41
38	Alteration of Polysaccharide Size Distribution of a Vertebrate Hyaluronan Synthase by Mutation. Journal of Biological Chemistry, 2003, 278, 19808-19814.	3.4	36
39	Dynamics of Hyaluronan Oligosaccharides Revealed by 15N Relaxation. Journal of the American Chemical Society, 2005, 127, 1086-1087.	13.7	32
40	Structure/Function Analysis of Pasteurella multocida Heparosan Synthases. Journal of Biological Chemistry, 2012, 287, 7203-7212.	3.4	32
41	Functional Characterization of PmHS1, a Pasteurella multocida Heparosan Synthase. Journal of Biological Chemistry, 2006, 281, 33192-33197.	3.4	31
42	Heparosan-coated liposomes for drug delivery. Glycobiology, 2017, 27, 1062-1074.	2.5	31
43	Acceptor Specificity of the Pasteurella Hyaluronan and Chondroitin Synthases and Production of Chimeric Glycosaminoglycans. Journal of Biological Chemistry, 2007, 282, 337-344.	3.4	30
44	Monodisperse Hyaluronan Polymers: Synthesis and Potential Applications. Current Pharmaceutical Biotechnology, 2008, 9, 246-248.	1.6	30
45	Nanoparticle Surface Engineering with Heparosan Polysaccharide Reduces Serum Protein Adsorption and Enhances Cellular Uptake. Nano Letters, 2022, 22, 2103-2111.	9.1	27
46	Functional Molecular Mass of a Vertebrate Hyaluronan Synthase as Determined by Radiation Inactivation Analysis. Journal of Biological Chemistry, 2001, 276, 39832-39835.	3.4	26
47	Fibroblast Growth Factor-based Signaling through Synthetic Heparan Sulfate Blocks Copolymers Studied Using High Cell Density Three-dimensional Cell Printing. Journal of Biological Chemistry, 2014, 289, 9754-9765.	3.4	26
48	Chemoenzymatic Synthesis of 4-Fluoro-N-Acetylhexosamine Uridine Diphosphate Donors: Chain Terminators in Glycosaminoglycan Synthesis. Journal of Organic Chemistry, 2017, 82, 2243-2248.	3.2	25
49	Synthesis of Uridine 5â€²-diphosphoiduronic Acid: A Potential Substrate for the Chemoenzymatic Synthesis of Heparin. Journal of Organic Chemistry, 2008, 73, 7631-7637.	3.2	23
50	Defined megadalton hyaluronan polymer standards. Analytical Biochemistry, 2006, 355, 183-188.	2.4	22
51	Heparosan, a promising â€˜naturally goodâ€™ polymeric conjugating vehicle for delivery of injectable therapeutics. Expert Opinion on Drug Delivery, 2015, 12, 349-352.	5.0	22
52	Synthesis and characterization of heparosan-granulocyte-colony stimulating factor conjugates: a natural sugar-based drug delivery system to treat neutropenia. Glycobiology, 2017, 27, 1052-1061.	2.5	20
53	Hyaluronan in cytosol--Microinjection-based probing of its existence and suggested functions. Glycobiology, 2013, 23, 222-231.	2.5	14
54	Synthesis of 4-Azido-N-acetylhexosamine Uridine Diphosphate Donors: Clickable Glycosaminoglycans. Journal of Organic Chemistry, 2017, 82, 9910-9915.	3.2	13

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55	Optimizing the sensitivity and resolution of hyaluronan analysis with solid-state nanopores. Scientific Reports, 2022, 12, 4469.	3.3	13
56	Strong Reduction of the Chain Rigidity of Hyaluronan by Selective Binding of Ca²⁺ Ions. Macromolecules, 2021, 54, 1137-1146.	4.8	12
57	Identification of a chondroitin synthase from an unexpected source, the green sulfur bacterium Chlorobium phaeobacteroides. Glycobiology, 2017, 27, cwx008.	2.5	11
58	Expanding glycosaminoglycan chemical space: towards the creation of sulfated analogs, novel polymers and chimeric constructs. Glycobiology, 2017, 27, 646-656.	2.5	10
59	Hyaluronic acid synthesis, degradation, and crosslinking in equine osteoarthritis: TNF-Î±-TSG-6-mediated HC-HA formation. Arthritis Research and Therapy, 2021, 23, 218.	3.5	9
60	Methods for isolating and analyzing physiological hyaluronan: a review. American Journal of Physiology - Cell Physiology, 2022, 322, C674-C687.	4.6	9
61	A quartz crystal microbalance method to quantify the size of hyaluronan and other glycosaminoglycans on surfaces. Scientific Reports, 2022, 12, .	3.3	9
62	Transposon Tn916insertional mutagenesis ofPasteurella multocidaand direct sequencing of disruption site. Microbial Pathogenesis, 1998, 24, 203-209.	2.9	8
63	Comamonas testosteronan synthase, a bifunctional glycosyltransferase that produces a unique heparosan polysaccharide analog. Glycobiology, 2011, 21, 1331-1340.	2.5	8
64	Enzymatic Synthesis of Glycosaminoglycans: Improving on Nature. ACS Symposium Series, 2007, , 253-284.	0.5	7
65	Rapid detection of hyaluronic acid capsules on group a streptococci by buoyant density centrifugation. Diagnostic Microbiology and Infectious Disease, 1994, 20, 77-80.	1.8	5
66	N-Sulfotestosteronan, A Novel Substrate for Heparan Sulfate 6-O-Sulfotransferases and its Analysis by Oxidative Degradation. Biopolymers, 2013, 99, 675-685.	2.4	5
67	Methods for the Pasteurella Glycosaminoglycan Synthases: Enzymes that Polymerize Hyaluronan, Chondroitin, or Heparosan Chains. Methods in Molecular Biology, 2013, 1022, 215-227.	0.9	5
68	Irreversible Heavy Chain Transfer to Chondroitin. Journal of Biological Chemistry, 2014, 289, 29171-29179.	3.4	4
69	The functional molecular mass of the Pasteurella hyaluronan synthase is a monomer. Biochimica Et Biophysica Acta - General Subjects, 2007, 1770, 286-290.	2.4	3
70	Glycosaminoglycan Synthases: Catalysts for Customizing Sugar Polymer Size and Chemistry. ACS Symposium Series, 2010, , 299-303.	0.5	1
71	HYALURONAN SYNTHASES: MECHANISTIC STUDIES AND BIOTECHNOLOGICAL APPLICATIONS. , 2002, , 227-236.		0
72	Sugar Engineering with Glycosaminoglycan Synthases. ACS Symposium Series, 2004, , 125-137.	0.5	0

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73	A primer for initiation of commercialization of glycobiological discoveries. Glycobiology, 2021, 31, 886-890.	2.5	0